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ABSTRACT

Summarized are findings of a 14-year longitudinal study of the educational and occupational outcomes of 524 adolescents in rural or urban low-income areas in six southern states. The sample included 343 white and 181 black youth. Focusing on the comparative contribution of the family as a context for adolescent educational and occupational attainment, results of path analysis for occupational attainment revealed a differential pattern of direct effects for black and white adolescents. For black adolescents, the contribution of the family exerted a more substantial direct effect on occupational attainment than for white adolescents. Comparison of the total effects on occupational attainment also confirmed the stronger influence of the family for black adolescents. The influence of the family on educational attainment was also found to be substantial for black youth. Comparison of total effects on educational attainment indicated a strong family influence for white adolescents and an even stronger influence for black adolescents. It is concluded that there is no evidence to support the stereotypical view of the black family as inadequate or dysfunctional. On the contrary, the evidence suggests that a dynamic and vital black family unit exists which exerts a substantial influence on the occupational and educational attainment of black children/adolescents. (RH)

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FAMILY INFLUENCE ON OCCUPATIONAL AND EDUCATIONAL ATTAINMENT OF RURAL/URBAN, LOW-INCOME ADOLESCENTS: SOME RACIAL COMPARISONS

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ABSTRACT

This paper will summarize findings of a 14-year longitudinal study of the educational and occupational outcomes of 524 adolescents in rural/urban, low-income areas in six Southern states. The sample included 343 whites (147 males; 196 females) and 181 blacks (90 males; 91 females). In terms of location, the sample for this study included the following: urban blacks (40 males, 37 females = 77 total), rural blacks (50 males, 54 females = 94 total), and rural whites (147 males, 196 females = 343 total). Despite the general recognition of the influence of families on adolescent occupational and educational attainment, limited attention has been given to the comparative contribution of families, schools, and individual characteristics. The focus of this paper is on the comparative contribution of the family as a context for adolescent educational and occupational attainment for black and white adolescents. A path model statistical technique was used to analyze the data.

Results for occupational attainment revealed a differential pattern of direct effects for black and white adolescents. For black adolescents, the contribution of the family exerted a more substantial direct effect on occupational attainment than for white adolescents. Comparison of the total effects (direct effects plus indirect effects) on occupational attainment also confirmed the stronger influence of the family for black adolescents.

The influence of the family on educational attainment was also found to be substantial for black youth. Comparison of total effects on educational attainment indicated a strong family influence for white adolescents and an even stronger influence for black adolescents.

INTRODUCTION

The influence of the family on the educational and occupational achievement of youth has attracted considerable attention from researchers in recent years. Interest has been augmented by numerous cross-cultural studies which have compared educational outcomes in such countries as Japan, Taiwan and the United States (Stevenson, Lee and Stigler, 1986; Stigler, Lucker and Stevenson, 1982). In addition, emphasis has been placed on "Youth-at-Risk" or children/adolescents growing up in families and communities which presumably provide inadequate support for positive developmental outcomes (McAdoo, 1988; Harrison, Serafica, and McAdoo, 1984). Although it is commonly acknowledged that families play a significant role in the occupational and educational attainment of adolescents, limited research has been directed at the extent of this contribution (Schulenberg, Vondracek, and Crouter, 1984; Grotevant and Cooper, 1988). For example, there is little information about the relative contribution of families to adolescent occupational and educational attainment compared with that of adolescent characteristics (I.Q., self-esteem) or school-related factors [individual achievement motivation, educational attainment] (Schiamberg and Chin, 1986; Stevenson, Lee, and Stigler, 1986). The central concerns of these researchers have been with one or more of the following questions. How do parental educational and occupational status predict the educational and occupational achievement of their children? How do parental values and child-rearing practices differ according to family background or socioeconomic status? How do parenting behaviors (or the child's perception of parenting behaviors) influence child self-concept, mental ability, and academic and achievement motivation which, in turn, are believed to be

related to children's educational and occupational achievement? The present study was designed to examine these questions with specific attention to the family influence on child educational and occupational attainment, to compare the magnitude of such familial influence to the contribution of other variables in the youth's environment and to compare the patterns of family contribution for white and black adolescents.[1] This study focused on the effects of the contexts of low-income, southern rural youth on their educational and occupational achievement.

In examining the contribution of white and black families to adolescent occupational and educational, several factors should be considered including the demographic background of black families and social stereotypes of black families. In 1980, blacks represented approximately 12 percent of the population or 26.5 million individuals (Bureau of the Census, 1983). A slight majority of this number resided in the South (53 percent) while 60 percent lived in urban areas. The current study examines black family functioning in six southern states and includes 77 urban black families.[2]

In addition to demographic factors, an examination of theoretical perspectives in the social sciences on black families also provides a context for correcting misconceptions. Many such theoretical views have been stereotypic (DuBois, 1908; Frazier, 1932, 1939; Pettigrew, 1964; Rainwater, 1966; Bell-Scott, 1976; Myers, 1982; Moynihan, 1965). Black families have been presented as structurally inadequate (i.e. either as single-parent families or as two-parent families with inadequate income) and dysfunctional. The present investigation comparing white and black family contributions to adolescent occupational and educational attainment addresses this stereotype of dysfunctionality.

METHODS

Subjects

The original study was longitudinal in design involving three phases of assessment: 1969 (subjects were fifth and sixth graders, ages 11-13 years), 1975 (subjects were high school juniors and seniors, ages 16-19 years), and 1979 (subjects were ages 20-23 years). The unit of analysis for this study was 524 individuals (out of 1412 mother-child pairs) who were followed over time and from whom completed questionnaires were available for all three assessment periods. Subjects included 181 blacks (90 males, 91 females) and 343 whites (147 males and 196 females).

The original sample was all children in fifth and sixth grades in 24 schools scattered over six southern states.[2] The schools themselves were selected by the investigators within their states so as to fill quotas assigned to each state of three types of low income localities--urban black, rural black and rural white. In terms of location, the sample for this study included the following: urban blacks (40 males, 37 females = 77 total), rural blacks (50 males, 54 females = 94 total), and rural whites (147 males, 196 females = 343 total). Random selection was ruled out since the investigators in each state were fairly familiar with almost all schools that were eligible. They could thus judge which were typical and they also knew which were unlikely to cooperate. Children were characterized as being from the rural subculture if they attended school and lived in the country or in a town with a population of less than 2,500. Since all families were from low income areas, there were no significant differences in family income, parent educational level, or parent occupational level (Shoffner, Kenkel, Schiamberg et. al., 1986).

Ecological Context of Occupational and Educational Attainment Variables

Given the focus of this research, the specific variables analyzed against occupational outcomes reflected several major contexts of development (e.g. family and school) and the interaction between these contexts and individual characteristics (e.g. achievement motivation, educational attainment). The specific variables which were used to predict occupational attainment were the following (See Figures I and II):

XI:Family background

X2:Child's characteristics

X3:Significant Other's Influence - Familial (Sig. - Family)

X4:Significant Other's Influence - Extra-familial (Sig. - Extra Familial)

X5:Achievement motivation - Youth's educational & occupational aspirations

X6:Educational attainment (post-adolescent period)

In turn, these same variables, with the exception of educational attainment, were used to predict the educational attainment.

Operational Definitions of the Variables.

The primary dependent or outcome variables in the present study were the occupational and educational attainments reported by subjects in 1979.

(1) Occupational Attainment: Occupational attainment was given a double digit occupational prestige score. This scale, ranging from 20-100, measures the relative prestige of occupations. This measure was developed by NORC (National Opinion Research Center) using a national sample of respondents who were asked to judge 90 occupations according to a five point scale with values from 20 = poor to 100 = excellent

(Reiss, 1961). Occupational choices were also categorized according to the nine-point Census classification system, which ranges from professional-technical (1) to laborer (9).

(2) Educational Attainment: Educational attainment was a measure of the educational level reached by respondents in 1979. Responses were coded in categories ranging from finishing 8th grade to finishing college and beyond with various intermediate combinations including trade schools and junior or community colleges.

The six independent or predictor variables were defined as follows (Shoffner and Peterson, 1986):

(1) Family Background: This was a composite socioeconomic status score based on the breadwinner's occupation (father or mother), the level of schooling of both mother and father, and a six-item measure of social participation (e.g., voter registration and voting behavior, church attendance, memberships in organizations, frequency of watching television (news), and reading (the newspaper).

(2) Significant Others'/Family: Essentially, this category reflected the influence of family members on the future plans of children/adolescents. Three questions were used to identify the significant others who influenced the educational and occupational plans of the low-income youth. During each of the three data collection phases respondents put a check by each family person who had talked to them and was important for advice about their job plans. Possible choices for these included "mother", "father", "older sibling", and "other relatives". In the 1979 early adulthood phase "spouse" was added.

Also included in the composite measure of "significant others/family" were parenting practices, as measured in four areas: mother's status projections for their children, mother's achievement orientations, parental values - characteristics of children valued, and mother's behavior as perceived by the child. These variables were defined and measured as follows:

(a) Mother's status projections for their children. Maternal educational expectations for the respondent were obtained in 1969 (when the children were fifth and sixth graders) using the following questions: "How far do you think (name) really will go in school?" "What kind of job do you think (name) really will have when he grows up?" Maternal occupational expectations were coded using NORC scores.

(b) Mother's Achievement Value Orientation. Items for this scale were compiled and modified from various sources, primarily Rosen (1964). "Disagree" was the appropriate achievement value response. Rosen (1964) used nine achievement items in a study in which both the mother and her son (age range from 7 to 14) were asked the questions. Achievement Value Orientation is a scale of seven of Rosen's nine items determined to be conceptually consistent using factor analysis. Young adults responded to these items in the 10-year follow-up to assess the degree to which a respondent agreed or disagreed with a series of statements representing beliefs about what was necessary for occupational success in the contemporary world. "A good son would try to live near his parents even if it means giving up a good job in another part of the country" is an example of an item used in this scale (Shoffner and Peterson, 1986).

(c) Parental Values-Characteristics of Children Valued. This variable was measured using Kohn's sixteen-item factor scale designed to determine the personality characteristics of the child that the mother valued most highly (Kohn's Parental Value Scale)(Kohn, 1969). Each mother was asked to select the characteristics which were most important for a child her child's age. Factor scores were assigned to each important dimension for a child her child's age. A positive scale score indicated a preference for "self-direction" while a negative score suggested a desired orientation of "behavior conformity" in a child her child's age.

(d) Mother's Behavior as Perceived by the Child. The 45-item Bronfenbrenner Parent Behavior Questionnaire (Devereux, et al., 1962) was used to assess the mother-child relationship as perceived by the child. Using factor analysis, Siegelman (1965, 1966) identified three factors (Loving, Demanding, Punishing) which were used in the present analyses. Originally there were fifteen clusters of three items each. A factor analysis of the responses of the 1412 children originally involved in this study indicated virtually the same three groupings as Siegelman had found (Shoffner and Peterson, 1986). Siegelman (1965) defined the three factors as follows (Shoffner and Peterson, 1986):

> Factor I: "Loving" depicted a parent who was readily available for counsel, support, and assistance. This parent enjoyed being with his child, praised the child, and was affectionate, concerned, and has confident about the child.

Factor II: "Punishment" indicated the greatest amount of consistency on the scale factor loadings. This factor characterized a parent who frequently used physical and nonphysical punishment with little concern for the feelings and needs of his child, and frequently for no apparent reason. Although rejection or hostility by the parent was not explicitly noted in the items, it was strongly suggested (Shoffner and Peterson, 1986).

Factor III: A controlling, demanding, protecting, and intrusive parent was indicated in the "Demanding" Factor. This parent insisted on high achievement, explained to the child why punishment was necessary, and became emotionally upset and distant when the child misbehaved (Shoffner and Peterson, 1986).

(3) Child characteristics: Included in this category were variables measured in 1969 when the subjects fifth and sixth graders, as follows.

(a) Mental Ability (IQ). The 1967 edition of the Otis-Lennon Mental Ability Test, Elementary II level, Form J, was used to measure child IQ. Validity coefficients ranging from .60 to .80 have been reported (Otis and Lennon, 1967). The accompanying manual indicated percentiles and stanines along with the following range of scores: 128 and above (4%) Superior; 112-127 (19%) Above Average; 88-111 (54%) Average; 72-87 (19%) Below Average; 71 and below (4%) Low (Otis and Lennon, 1969).

(b) Self-Concept. The scale used to measure self-concept was developed and consisted of 22 descriptive words or phrases which the respondents checked according to how well they believed the items

described the way they felt about themselves (Lipsett, 1958). Before choosing the Lipsett scale it was pretested along with other instruments; these other instruments proved too difficult for the target population. Since the Lipsett items had been used successfully by other researchers with 5th and 6th graders, it was selected. Several items were slightly modified or amplified to assist child comprehension (parenthetical descriptions were added to 10 items) and the item "brave" was omitted (Shoffner and Peterson, 1986).

Rather than using the 22 Lipsett items designed for grade school children in the 1979 follow up study, only 7 items were used. These had been used successfully in the National Longitudinal Study of the High School Class of 1972 (National Center for Education Statistics, 1978). Respondents read the statements and checked either "agree strongly", "agree", "disagree", or "disagree strongly" (Shoffner and Peterson, 1986).

(c) Academic Motivation. Academic motivation was assessed by using six items from Elder's (1962) scale and four items from Weiner's Achievement Motivation Scale. The Elder scale included items such as "I am interested in my school work," "I really try to get good grades," and so on. The Weiner Scale consisted of items such as "When I am sick, I would rather be_____." The respondent's choice of answer was from two-response categories that represented either low or high motivation (Shoffner and Peterson, 1986).

(4) Significant Others'/Extra Familial: This variable was measured by the subject's indication whether they discussed future plans with persons (other than family members) such as teachers, friends, neighbors,

"someone else", or "no one".

(5) Achievement Motivation: In 1969, 1975, and 1979, achievement motivation was measured using educational aspirations/expectations and occupational aspirations/expectations (Shoffner and Peterson, 1986).

(a) Educational Aspirations and Expectations. Subjects were asked "If you had your choice, how far would you like to go in school?" and "How far do you think you really will go in school?" These questions were the measures of educational aspirations and educational expectations, respectively. The respondent checked 1 of 8 choices ranging from trade or vocational/technical school to desiring no further education. In each year, the responses were summed and a mean score was used as the overall measure for educational aspirations and expectations.

(b) Occupational Aspirations and Expectations. Subjects were asked the following questions to measure occupational aspirations and occupational expectations, respectively: "If you could choose any job you wanted, what kind of job would you really like to have in the future?" and "what kind of job do you think you really will have in the future?" Both occupational aspirations and expectations were coded using NORC scores.

(6) Educational Attainment: In 1979 respondents were asked the following question: "How far have you gone in school?" They were asked to check one of the ten response categories. Educational attainment was used as both an outcome variable (see discussion above) and as a predictor variable for occupational attainment.

RESULTS AND DISCUSSION

Results of this paper summarize selected findings of a 14-year longitudinal study of the educational and occupational outcomes of 524 adolescents (343 whites and 181 blacks) in rural, low-income areas in six Southern states. Despite the general recognition of the influence of families on adolescent occupational and educational attainment, limited attention has been given to the comparative contribution of families, schools, and individual characteristics (Grotevant and Cooper, 1988; Otto, 1986; Stevenson et al., 1986). The focus of this paper is on the comparative contribution of the family as a context for adolescent educational and occupational attainment for black and white adolescents.

A path model statistical technique was used to analyze the contribution of the following variables to adolescent occupational attainment (as measured by NORC occupational prestige scores): family background (e.g., parent educational and occupational levels), child characteristics (e.g., I.Q. and self-concept), significant others-parents, (i.e. talking with family members about future plans), significant others-teachers, (i.e. talking with teachers about future plans), achievement motivation (defined as adolescent occupational and educational aspirations/expectations), and educational attainment (as measured by total years of school). These same variables (with the exception of educational attainment) were used in the path analysis of educational attainment.

Results of the path analysis model of occupational development for blacks and whites revealed a differential pattern for direct effects (see

Table 1 and Figures I and II). For white adolescents, the only direct effect on occupational attainment was achievement motivation. For black adolescents, however, both achievement motivation and "significant others-parents" had a significant direct effects on occupational attainment. That is, for black adolescents the role of family communication and support was a much more important factor than for white adolescents. However, for white adolescents achievement motivation (i.e., adolescent occupational aspirations/expectations) was more influential than for black youth.

Analysis of the influence of total effects (i.e., direct effects plus indirect effects) on occupational attainment also revealed the stronger contribution of the family for black youth compared to white youth (see Table 1). For example, the total effect of family influence for black adolescents (family background, B = .19, plus significant others-parents, B = .24, produced a total effect of B = .43) exceeded the effect of any other variable or combination of variables. In contrast the total effect of the family for white adolescents (B = .28) was less than the total effect of achievement motivation (B = .60).

The influence of the family on educational attainment was also found to be substantial for black youth (see Table II and Figures I and II). For black adolescents, two of the three direct effects on educational attainment were family variables (i.e., significant others-parents = .23 and family background = .18). Taken together, these family - related variables (as direct effects on the educational attainment of black youth) were close, in magnitude, to the impact of the third direct effect - achievement motivation (.43). In contrast, for white youth, family background (.20) was the only significant family variable that had a direct effect on educational

attainment, having a lesser impact than achievement motivation (.36).

Comparison of total effects on educational attainment indicated the strong influence of the family for white adolescents and the even stronger influence for black adolescents (see Table II). For example, the total impact of the family (significant others-parents, B = .12, plus family background, B = .35, produced a total effect of B = .47) for white adolescents was substantial but did not exceed the combined total effects of both achievement motivation (B = .36) and child characteristics (B = .23). On the other hand, the total effect of the family for black adolescents (significant others-parents, B = .23, plus family background, B = .37, produced a total effect of B = .60) exceeded the total effect of achievement motivation (B = .43).

CONCLUSIONS

In summary, the contribution of the family to the occupational and educational development of rural/urban low-income adolescents is a vital one for both black and white adolescents. Based on the findings of this study, the following conclusions are relevant:

1. Since all families in this study were all selected from low-income areas, comparisons of white and black families are not as biased as would be the case if socioeconomic level were not controlled.
2. There is no evidence to support the stereotypical view of the black family as inadequate or dysfunctional. On the contrary, the evidence suggests a dynamic and vital unit which exerts a substantial influence on the occupational and educational attainment of black children/adolescents.

3. Although the contribution of the family to occupational and educational attainment is significant for both black and white adolescents, it appears to be even more important for black youth.
4. The implications of these findings are of particular significance for those who work with low-income adolescents - both black and white.

TABLE I. Decomposition of Effects of Significant Predictors of Occupational Attainment for Rural/Urban, Low-Income Adolescents

Dependent Variables	Path Coefficients/ Direct Effect[1]	Indirect Effects[2]	Total Effect
	WHITE ADOLESCENTS		
Educational Attainment	N.S	N.S	N.S
Achievement Motivation ('79 Occupational Aspiration/Expectations)	.60	N.S	.60
Significant Others-Parents	N.S	.08 (through child's characteristics)	.11
Significant Others-Extra Familial	N.S	N.S	N.S
Child Characteristics	N.S	.08 (through Achievement Motivation)	.08
Family Background	N.S	.02 (through child's characteristics) .12 (through Achievement Motivation) .02 (through Significant family) .01 (through Sig. family & child char.)	.17
	BLACK ADOLESCENTS		
Educational Attainment	N.S	N.S	N.S
Achievement Motivation	.37	N.S	.37
Significant Others Parents	.24	N.S	.24
Outsiders	N.S	N.S	N.S
Child's Characteristics	N.S	N.S	N.S
Family Background	N.S	.12 (through Achievement Motivation) .07 (through Significant parents)	.19

[1]All path coefficients are significant at <.05 level

[2]The indirect effect of a given variable on occupational attainment was determined by multiplying the direct effect of the given variable on a mediating variable (e.g., the direct effect of child characteristics on the mediating variable, achievement motivation, = .14) by the total effect (e.g., direct plus indirect effect) of the mediating variable (e.g., achievement motivation) on occupational attainment (.60).

TABLE II. Decomposition of Effects of Significant Predictors of Educational Attainment for Rural/Urban, Low-Income Adolescents

Dependent Variables	Path Coefficients/ Direct Effect[1]	Indirect Effects[2]	Total Effect
	WHITE ADOLESCENTS		
Achievement Motivation	.36	N.S	.36
Significant Others-Parents	N.S	.05 (through Achievement Motivation)	.12
	N.S	.07 (through child's characteristics)	
Significant Others-Extra Familial	N.S	N.S	N.S
Child Characteristics	.18	.05	.23
Family Background	.20	.07 (through Achievement Motivation)	.35
		.03 (through Significant Parents/family)	
		.05 (through child's characteristics)	
	BLACK ADOLESCENTS		
Achievement Motivation	.43	N.S	.43
Significant Others-Parents	.23	N.S	.23
Significant Others-Extra Familial	N.S	N.S	N.S
Child's Characteristics	N.S	N.S	N.S
Family Background	.18	.13 (through Achievement Motivation)	.37
		.06 (through Significant parents)	

[1]All path coefficients are significant at <.05 level

[2]The indirect effect of a given variable on educational attainment was determined by multiplying the direct effect of the given variable on a mediating variable (e.g., the direct effect of child characteristics on the mediating variable, achievement motivation, = .14) by the total effect (e.g., direct plus indirect effect) of the mediating variable (e.g., achievement motivation) on educational attainment (.36).

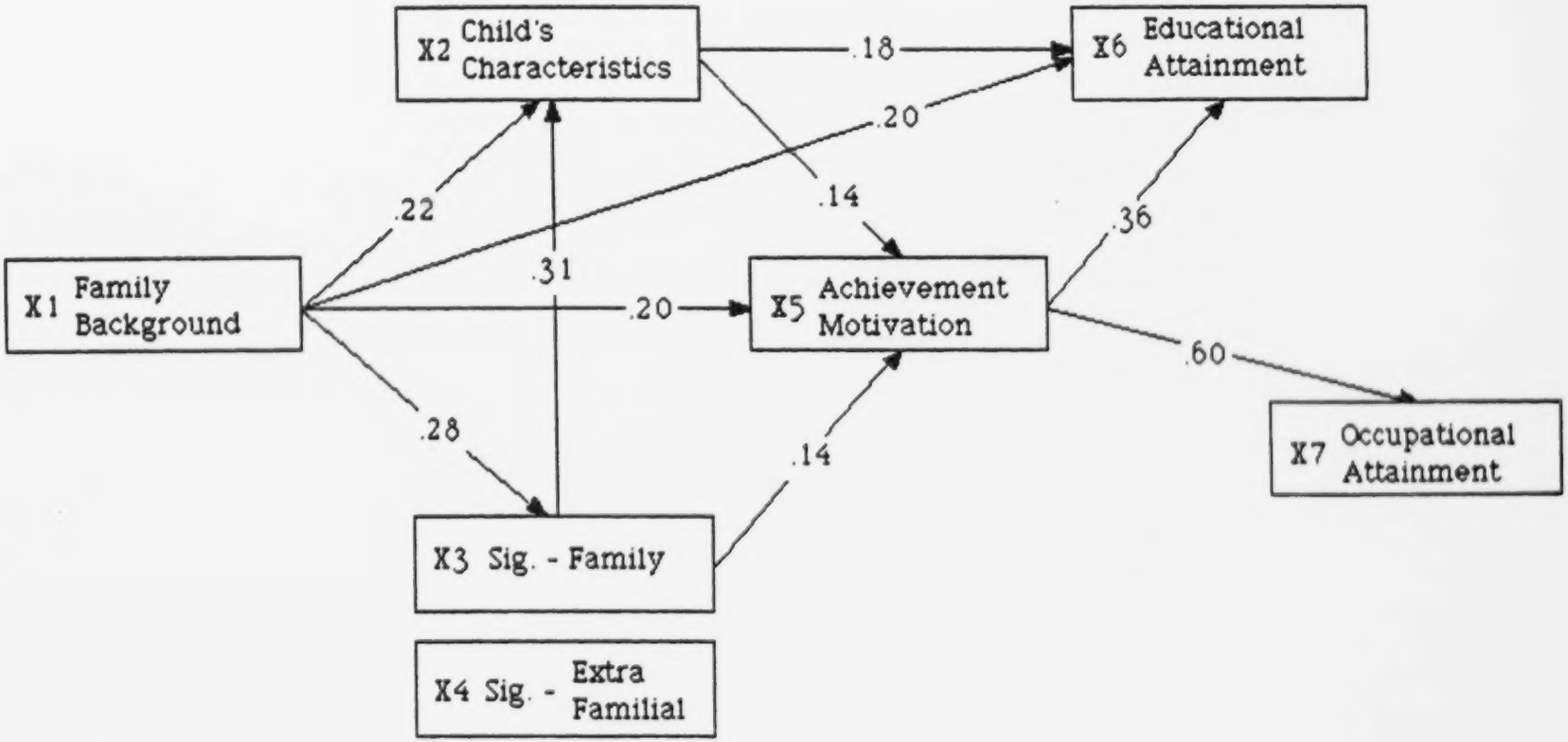

Figure I. Path Diagram of Occupational and Educational Attainment: White Youth

(All path Coefficients are significant at .05 level)

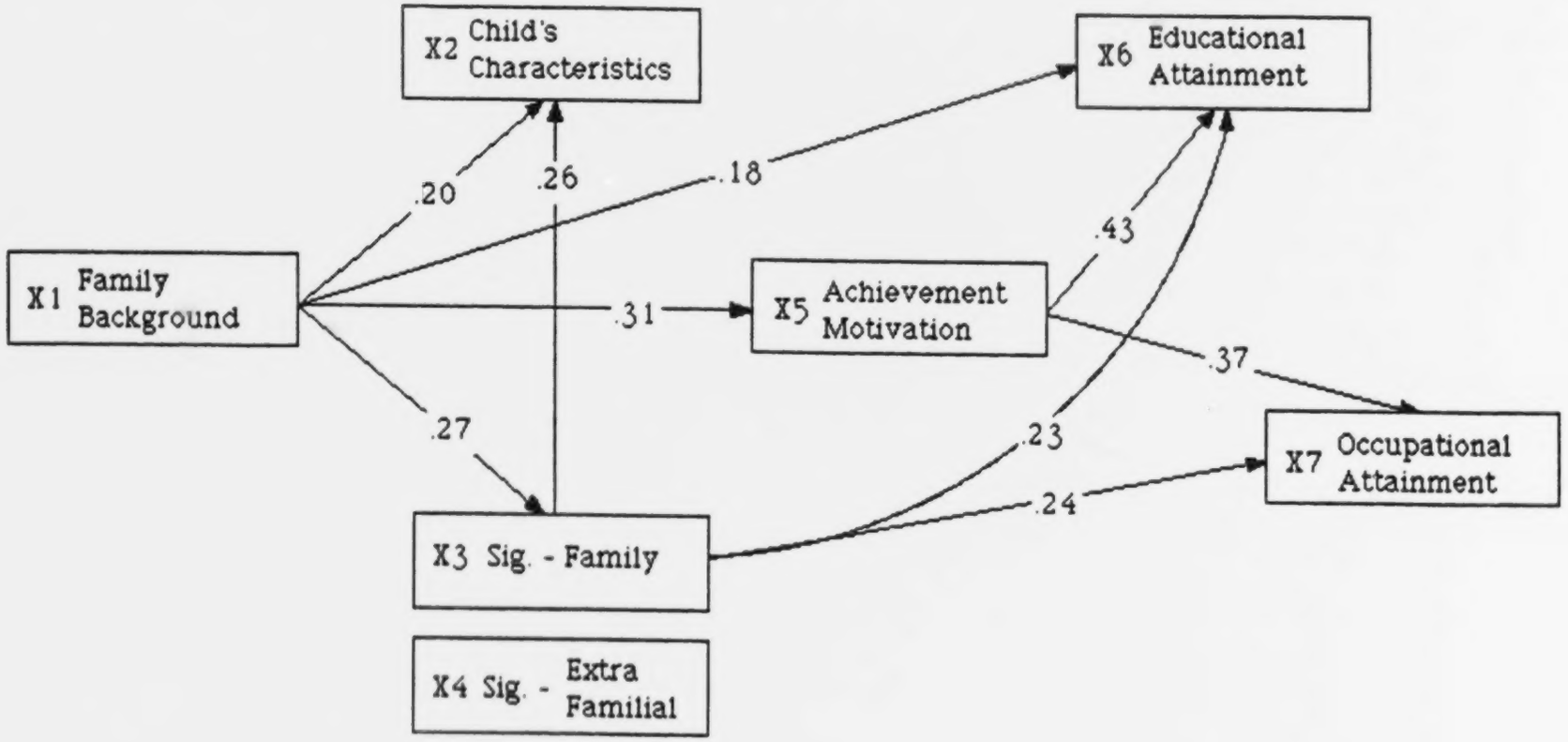

Figure II. Path Diagram of Occupational and Educational Attainment: Black Youth

(All path coefficients are significant at .05 level)

Footnotes

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[2]Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia.

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